



# Indicators of Children's Well-Being

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## Special Features

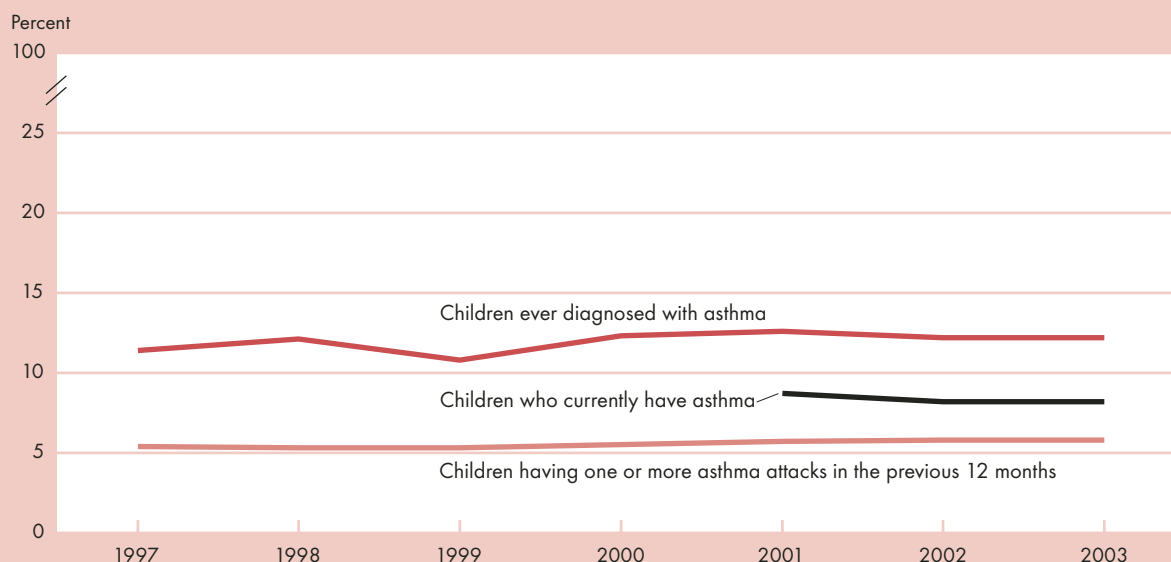
**S**pecial features provide an opportunity to present important information in addition to the key national indicators in this report. This year's special features report on children with asthma, children with specified blood lead levels, and parental reports of children's emotional and behavioral difficulties.

# Asthma

**A**sthma is a disease of the lungs that can cause wheezing, difficulty in breathing, and chest pain. It is one of the most common chronic diseases among children and is costly in both health and monetary terms. Asthma varies greatly in severity. Some children who have been diagnosed with asthma may not experience any serious respiratory effects. Other children may have mild symptoms or may respond well to management of their asthma, typically through the use of medication. Some children with asthma may suffer serious attacks that greatly limit their activities resulting in visits to emergency rooms or hospitals, or in rare cases, cause death. Environmental factors such as air pollution and secondhand tobacco smoke,<sup>108</sup> along with infections,<sup>109</sup> exercise and allergens,<sup>110</sup> can trigger asthma attacks in children who have the disease. Objective 24–2a of the Healthy People 2010 initiative aims to reduce hospitalizations for asthma for children under age 5 years.

## Indicator SPECIAL1

## Percentage of children ages 0–17 with asthma, 1997–2003



NOTE: Children are identified as having asthma by asking parents "Has a doctor or other health professional EVER told you that your child has asthma?" If the parent answers YES to this question, they are then asked (1) "Does your child still have asthma?" and (2) "During the past twelve months, has your child had an episode of asthma or an asthma attack?" The question "Does your child still have asthma?" was introduced in 2001.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

- In 2003, about 13 percent of children had been diagnosed with asthma at some time in their lives, though some of those children may no longer have asthma.
- About 9 percent of children were reported to currently have asthma in 2003. These include children with active asthma symptoms and those whose asthma is well-controlled.
- Approximately 6 percent of all children had one or more asthma attacks in the previous 12 months. These children have ongoing asthma symptoms that could put them at risk for poorer health outcomes, including hospitalizations and death. About two-thirds of children who currently have asthma have on-going asthma symptoms.
- In 2003, about 13 percent of Black-alone, non-Hispanic children were reported to currently have asthma, compared to 8 percent of White-alone, non-Hispanic and 7 percent of Hispanic children.<sup>1</sup>

Disparities exist within the Hispanic population such that 21 percent of Puerto Rican children were reported to currently have asthma, compared with 5 percent of Mexican children.

- From 1997–2003 the trends for these three asthma indicators remained fairly stable. Between 1980 and 1995, childhood asthma, as measured by the question, "During the past twelve months, did anyone in the family have asthma?" more than doubled (from about 4 percent in 1980 to approximately 8 percent in 1995). Methods for measurement of childhood asthma changed in 1997, so earlier data cannot be compared to data from 1997–2003.

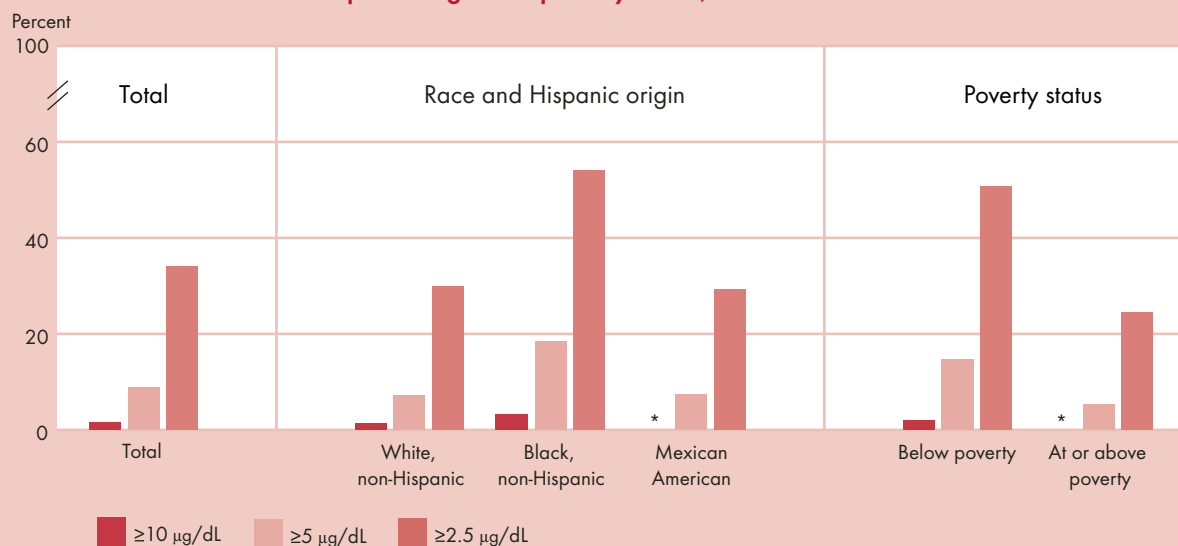
*Bullets contain references to data that can be found in Tables SPECIAL1.A and SPECIAL1.B on page 163. Endnotes begin on page 73.*

## Lead in the Blood of Children

**L**ead is a major environmental health hazard for young children. Childhood exposure to lead contributes to learning problems such as reduced intelligence and cognitive development.<sup>111–113</sup> Studies have shown that childhood exposure to lead contributes to hyperactivity and distractibility,<sup>114–116</sup> increases the likelihood of having a reading disability and lower vocabulary,<sup>117</sup> and increases the risk for antisocial and delinquent behavior.<sup>118</sup> A blood lead level of 10 micrograms per deciliter (µg/dL) or greater is considered elevated,<sup>119,120</sup> but adverse health effects have been shown to occur at lower concentrations.<sup>112,113,121,122</sup> Lead exposures have declined since the 1970s, due largely to the removal of lead from gasoline and fewer homes with lead-based paint.<sup>121,123</sup> Dust contaminated by lead paint in older homes and lead in soil remain as potential sources of exposure.<sup>119,124–126</sup> Children ages 1–5 years are particularly vulnerable because of frequent hand-to-mouth behavior. Objective 8–11 of the Healthy People 2010 initiative aims to eliminate elevated blood lead levels in children.

### Indicator SPECIAL2.A

#### Percentage of children ages 1–5 with specified blood lead levels by race and Hispanic origin and poverty status, 1999–2002



\* Data not shown. Estimates are considered unreliable (relative standard error is greater than 40 percent).

NOTE: Data for 1999–2002 are combined.

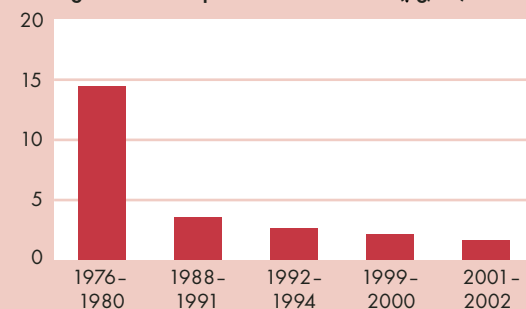
SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey.

- In 1999–2002, about 2 percent of children ages 1–5 had elevated blood lead levels [greater than or equal to 10 micrograms per deciliter (µg/dL)]. This is a substantial decline from the approximately 88 percent of children in 1976–1980 with blood lead levels at or above 10 µg/dL.
- About 19 percent of Black, non-Hispanic children, 7 percent of White, non-Hispanic children, and 7 percent of Mexican American children had blood lead levels at or above 5 µg/dL in 1999–2002.
- Children in homes with incomes below poverty generally had greater blood lead levels than children in homes above poverty.
- The median blood lead concentration for children ages 1–5 dropped from about 14 micrograms per deciliter (µg/dL) in 1976–1980 to about 2 µg/dL in 2001–2002, a relative decline of 89 percent.

### Indicator SPECIAL2.B

#### Median blood lead concentration among children ages 1–5, selected years 1976–2002

Micrograms of lead per deciliter of blood (µg/dL)



SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey.

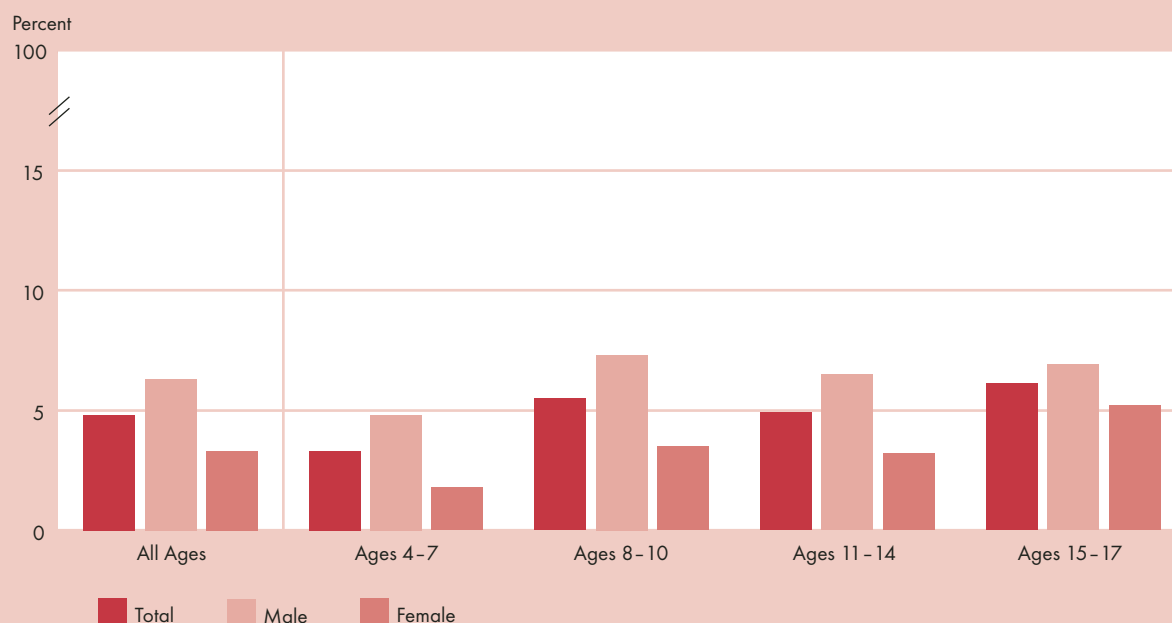
Bullets contain references to data that can be found in Tables SPECIAL 2.A and SPECIAL 2.B on page 164. Endnotes begin on page 73.

## Parental Reports of Emotional and Behavioral Difficulties

**G**ood emotional and behavioral health enhances a child's sense of well-being, leads to satisfying social relationships at home and with peers, and leads to achievement of full academic potential.<sup>127</sup> Children with emotional and behavioral difficulties may have problems managing their emotions, focusing on tasks, and/or controlling their behavior. These difficulties, which may persist throughout a child's development and can lead to lifelong disability,<sup>127,128</sup> are usually first noticed by parents. Parents' reports are crucial to alerting doctors about their child's emotional and behavioral difficulties and to obtaining mental health services.<sup>129</sup>

### Indicator SPECIAL3

#### Percentage of children ages 4–17 reported by a parent to have definite or severe emotional or behavioral difficulties, by age and gender, 2003



NOTE: Children with definite or severe emotional or behavioral difficulties are defined as those whose parent responded “yes, definite” or “yes, severe” to the following question on the Strengths and Difficulties Questionnaire (SDQ):<sup>130</sup> “Overall, do you think that (child) has any difficulties in one or more of the following areas: emotions, concentration, behavior, or being able to get along with other people?” Response choices were: (1) no; (2) yes, minor difficulties; (3) yes, definite difficulties; (4) yes, severe difficulties.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

- In 2003, 5 percent of children ages 4–17 were reported by a parent to have definite or severe difficulties with emotions, concentration, behavior, or being able to get along with other people.
- The percentage of children with definite or severe emotional or behavioral difficulties differed by age and gender. The overall percentage for males was 6 percent; it ranged from a low of 5 percent among ages 4–7 to a high of 7 percent among ages 8–10 and 15–17. The overall percentage for females was 3 percent; it ranged from a low of 2 percent among ages 4–7 to a high of 5 percent among ages 15–17.
- Eight percent of children living below the poverty level had definite or severe difficulties, compared with 6 percent of children in near-poor families (those with family incomes 100–199 percent of the poverty level) and 5 percent of children in non-poor families (those with family incomes 200 percent or more of the poverty level).<sup>131</sup>
- Four percent of children in families with two parents, 7 percent of children in mother-only families, and 4 percent in father-only families were reported to have definite or severe emotional or behavioral difficulties. Nine percent of children not living with either parent were reported to have definite or severe difficulties. This group includes children cared for by other relatives such as a grandparent.
- Sixty-five percent of parents who reported their child had definite or severe emotional or behavioral difficulties also reported contacting a mental health professional or general doctor and/or that the child received special education for these difficulties. Nine percent of parents reported that they wanted mental health care for their child, but could not afford it.

*Bullets contain references to data that can be found in Tables SPECIAL 3.A and SPECIAL 3.B on pages 165–166. Endnotes begin on page 73.*